

Japanese Patent Laid-open Publication No. HEI 11-340949 A

Publication date : December 10, 1999

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Title : CDMA COMMUNICATION APPARATUS AND CDMA COMMUNICATION

5 METHOD

(57) [ABSTRACT]

[PROBLEM]

10 The object of the present invention is to reduce the number of correlation apparatuses, decreasing a size of the apparatus and saving the weight of the apparatus.

[SOLUTION]

15 An analog signal, which is received by a first antenna 101, is converted into a digital signal by first A/D converting means 103 to be stored in first storing means 105. Then, first phase rotating means 109 controls the phase rotation amount of a received signal to amplify the amplitude of the received signal by first amplifying means. Alternatively, an analog signal, which is received by a second antenna 102, is also  
20 provided with the same processing. After respective signals are added to addition means 113, correlation detecting means 114 detects the correlation and takes out a inverse-diffusion signal.

25 FIG. 5 is a block diagram for illustrating a conventional CDMA communication apparatus.

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FIG. 5

11: ANTENNA 1

RECEIVED SIGNAL I, RECEIVED SIGNAL Q,

5 13: AD CONVERTING MEANS 1

15: STORING MEANS 1

17: CORRELATION DETECTING MEANS 1

18: CORRELATION DETECTING MEANS 2

23: PHASE ROTATING MEANS 1

10 PHASE ROTATION AMOUNT

21: CIRCUIT STATE ESTIMATING MEANS 1

25: AMPLIFYING MEANS 1

AMPLIFYING AMOUNT

27: ADDING MEANS

15 REVERSE DIFFUSED SIGNAL

12: ANTENNA 2

RECEIVED SIGNAL I, RECEIVED SIGNAL Q,

14: AD CONVERTING MEANS 2

16: STORING MEANS 2

20 19: CORRELATION DETECTING MEANS 3

20: CORRELATION DETECTING MEANS 4

24: PHASE ROTATING MEANS 2

PHASE ROTATION AMOUNT

22: CIRCUIT STATE ESTIMATING MEANS 2

25 26: AMPLIFYING MEANS 2

AMPLIFYING AMOUNT

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